

## RECENT ADDITIONS TO THE PONTONIINE SHRIMP FAUNA OF AUSTRALIA.

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### ABSTRACT

Recent additions to the pontoniine shrimp fauna of Australia are reviewed and data are provided on seven species not previously known from Australia: *Onycocharis spinosa* Fujino and Miyake, *Periclimenes mahei* Bruce, *Platypontonia brevirostris* (Miers), *Pontonia stylirostris* Holthuis, *Tuleariocaris holthuisi* Hipeau-Jacquotte, *Vir orientalis* (Dana) and *V. philippinensis* Bruce and Svoboda. Recent nomenclatural amendments are included. The number of species presently known is increased from 136 to 168 and their distributions and zoogeography are discussed.

KEYWORDS: Crustacea: Decapoda: Palaemonidae, Australian fauna, recent additions, new records, zoogeography, Indo-West Pacific.

### INTRODUCTION

In 1983, Bruce (1983a) provided a review on the occurrence of 136 species of pontoniine shrimp in the seas around Australia, described up to 1980. Since that publication, three of the species, of the genus *Anchistioides*, have been transferred to the resurrected family Anchistioideidae Borradaile, and two species, of *Gnathophylloides*, have been transferred from the family Gnathophyllidae Dana. Two of the species of *Periclimenaeus* have now been placed in separate monospecific genera. In addition, 21 new species of pontoniine shrimp have been described from Australian waters, including four new monospecific genera. Seven species previously recorded from the Indo-West Pacific have also been found in Australian waters, and a further seven species are reported here for the first time. The possible occurrence of *Coralliocaris macrophthalmus* (H. Milne-Edwards) has been reported from Heron Island, Queensland (Bruce 1977), but because of its dubious status, it is not considered further in this review. These additions increase the total number of species known from Australia to 168.

Although a rich and diverse fauna is present in the seas around Australia, comparison with other regions is difficult as comparable studies in many areas have not yet been carried out.

Although detailed studies of the Indonesian fauna have been made through the activities of the *Siboga* and *Suellius* expeditions (1899-1900, 1929-1930), these were carried out before the common use of SCUBA equipment. Undoubtedly many of the recently discovered tropical Australian species will be found to also occur in Indonesian waters in due course, probably together with much that is completely new. The pontoniine fauna of the Philippines is not well known, and that of Papua-New Guinea even less. All these areas, with their extensive reef systems, the primary habitat for most pontoniine shrimps, may be expected to have a pontoniine fauna at least as diverse as that of Australia.

The enumeration of species follows the listing given in Bruce (1983a), after adjustment for the alterations mentioned above. Species with numbers represent new records; species without numbers (cited as -) represent nomenclatural changes.

### ANNOTATED SPECIES LIST

#### Genus *Apopontonia* Bruce, 1976

134. *Apopontonia dubia* Bruce, 1981: This species was originally described from a single female specimen from 20m depth at Shag Rock, off North Stradbroke Island, Queensland, collected in 1979 in association with a

sponge, *Ircinia* cf. *echinata* (Keller) (Bruce 1981). It has subsequently reported from Heron Island, Queensland (Bruce 1983f); recently from 43 m depth, off New Caledonia. The genus contains only two other species, *A. falcistrostris* Bruce, known only from the type specimen from 73 m depth off Madagascar, and the following species.

135. *Apopontonia tridentata* Bruce, 1988: A single ovigerous female of this species was collected in 1983 from the Northwest Shelf from 54 m depth at 19° 41.9'S, 117° 57.15E (not 17° 57.15'E, as given in the original description (Bruce 1988b)). There have been no further reports of this species, whose host remains unidentified, but is most probably a sponge.

#### Genus *Carinopontonia* Bruce, 1988

136. *Carinopontonia paucipes* Bruce, 1988: The only known specimen of this unusual shrimp, unfortunately lacking many of its appendages, was collected from 83 m depth on the Northwest Shelf at 19° 04.4'S, 118° 47.55'E in 1983 (Bruce 1988b). The host of this species is unknown, but it is certainly a commensal species and a coelenterate association seems highly likely.

#### Genus *Chernocaris* Johnson, 1967

137. *Chernocaris placunae* Johnson, 1967: Twelve specimens were collected in 1981, from *Placuna placenta* from 27 m depth in the Arafura Sea at 12° 58.0'S, 132° 10.0'E (Bruce 1983d). This is only the second recorded occurrence of this species, otherwise known only from Singapore.

#### Genus *Conchodytes* Peters, 1875

- *Conchodytes kemp* Bruce, 1989e: This species was referred to in the list given by Bruce (1983a) under the name of *C. biunguiculatus* Paulson 1875. There is still doubt as to the distribution of Paulson's species and whether or not it occurs in Australian waters. *Conchodytes kemp* has been reported from the Andaman Islands and the Philippines, and it seems likely that Australian specimens will belong to this species. Further study of *Conchodytes* specimens from pinnid hosts will be necessary before the general distribution of these shrimps can be satisfactorily clarified.

138. *Conchodytes maculatus* Bruce, 1989: A pair of specimens and a single male speci-

men were first collected from pearl oysters, *Pinctada maxima*, from about 40 m depth in the Arafura Sea, at about 16° 33.5'S, 121° 25.75'E in 1985 (Bruce 1989c). There are no other known specimens of this species.

#### Genus *Dasella* Lebour, 1945

139. *Dasella ansoni* Bruce, 1990d. A male and ovigerous female were found together in an ascidian host, *Phallusia depressiuscula* Heller, from 27 m depth in the Arafura Sea, at 12° 58.0'S, 132° 10.0'E collected in 1981. (Bruce 1983b). No further occurrences have been reported.

- *Dasella brucei* Berggren, 1990: A specimen of this species was initially reported by Bruce (1981a), who recorded a single male in the ascidian *Herdmania momus* from Heron Island, Queensland, as *D. herdmaniae*, from 14 m depth. This species has been recently recognized as a distinct species, so far known from type material only, by Berggren (1990). *Dasella herdmaniae* is known only from southern India and Mozambique.

#### Genus *Epipontonia* Bruce, 1977

140. *Epipontonia anceps* Bruce, 1983: First described from four specimens from Heron Island, southern Great Barrier Reef from 18 m depth collected in 1979 from a sponge host, *Dysidea* sp. (Bruce 1983c). There have been no further records of this species. The genus contains one other species, *E. spongicola* Bruce, 1977 known only from Kenya.

#### Genus *Exopontonia* Bruce, 1988

141. *Exopontonia malleatrix* Bruce, 1988: A single ovigerous female specimen of this species was collected from pulverized coral rubble from intertidal reef flat at Ashmore Reef, Timor Sea in 1987 (Bruce 1988a). There are no other records of the species, whose host is unknown, but which may be an associate of sponges.

#### Genus *Gnathophylloides* Schmitt, 1933

142. *Gnathophylloides mineri* Schmitt, 1933: First recorded in Australian waters from the North Solitary Islands, New South Wales, from 12 m depth, in association with the urchin *Tripneustes gratilla* (L.) collected in 1988 (Bruce 1989a). Originally described from Caribbean specimens, this species is now also known from Malpelo Island, Colombia; Ha-



vaii, Tonga, Zanzibar and the Seychelle Islands, and is therefore one of the few Australian shrimps that have a circumtropical distribution. The Australian records also represent the most southerly extent of the distribution of this species.

143. *Gnathophylloides robustus* Bruce, 1973: This species, known only from the type material, a male and three ovigerous females, was found on the sea-urchin, *Centrostephanus tenuispinus* H.L. Clark at 3 m depth off Point Moore, Geraldton, Western Australia (Bruce 1973). There have been no subsequent records of this shrimp.

#### Genus *Hamopontonia* Bruce, 1970

144. *Hamopontonia essingtoni* Bruce, 1987: Described from 13 specimens from Coral Bay, Port Essington, Cobourg Peninsula, in association with a coral host, *Stylophora pistillata* (Esper) collected in 1985 from 6 m depth (Bruce 1987a). No further records have been reported.

#### Genus *Miopontonia* Bruce, 1985

145. *Miopontonia yongei* Bruce, 1985: This species is known only from a male and an ovigerous female collected from 40 m and 80 m depth on the Northwest Shelf, by the FRV *Soela* in 1983, from stations at 19° 29.0'S, 118° 52.0'E and 19° 04.3'S, 118° 55.5'E respectively (Bruce 1985). The host animals were not identified but are considered most likely to be gorgonians or antipatharians. The genus *Miopontonia* is monospecific and most closely related to the Caribbean genera *Coutierea* Nobili and *Pseudocoutierea* Holthuis.

#### Genus *Onycocaridites* Bruce, 1987

146. *Onycocaridites anomodactylus* Bruce, 1987: The type material and only known specimens of this species, a damaged male and female, were obtained from an unidentified sponge from 60 m depth in the Arafura Sea, at 10° 40'S, 133° 50'E in 1986 (Bruce 1987c).

#### Genus *Onycocaris* Nobili, 1904

147. *Onycocaris spinosa* Fujino and Miyake, 1969: Not previously reported from Australian waters, a male and two ovigerous females were collected from a depth of 10 m depth in a blue sponge on the reef slope off Heron Island, Queensland, in 1980 by R. Boer. Originally described from Yoron-jima,

Ryukyu Islands, and subsequently from Okinawa, there have been no other records of this species.

#### Genus *Orthopontonia* Bruce, 1982

- *Orthopontonia ornatus* (Bruce, 1969): This species was referred to in the previous report (Bruce 1983a) under the name of *Periclimenaeus ornatus*. *Orthopontonia* is a monospecific genus and *O. ornatus* occurs from East Africa to Australia. The species is an associate of sponge hosts.

#### Genus *Periclimenaeus* Borradaile, 1915

148. *Periclimenaeus orontes* Bruce, 1987: Known only from a single ovigerous female specimen, collected on Orontes Reef off Port Essington, Cobourg Peninsula, from a sponge host *Jaspis stellifera* (Carter), from a depth of 3 m depth in 1982 (Bruce 1987a). There have been no subsequent records of this shrimp.

149. *Periclimenes agag* Kemp, 1922: Bruce (1990d) recently examined specimens of this species from Lizard Island, Queensland, from baited traps set at Coconut Beach, Watson's Bay and off Eagle Island at 1-17 m depth collected by S. Keable in 1988. There have been no previous records of this species from Australian waters. Originally reported from the Andaman Islands by Kemp (1922), and subsequently from the Red Sea, New Caledonia and the Marshall Islands, the species is probably a free-living micropredator.

150. *Periclimenes alegrias* Bruce, 1987: First found at Coral Bay, Port Essington, Cobourg Peninsula, and subsequently at North-West Vernon Island, this species is known from only four specimens, from 2-4 m and 8 m depth in association with crinoid hosts, *Stephanometra spicata* (Carpenter), *Lamprometra palmata* (Müller) and *Comanthina variabilis* (Bell) (Bruce 1987a). There have been no further reports of this species.

151. *Periclimenes anacanthus* Bruce, 1989: A dozen specimens of this species were first collected from *Zostera* beds in southern Moreton Bay, Queensland, in 1987 (Bruce 1989b). There have been no subsequent reports of this species, which is probably free-living.

152. *Periclimenes andamanensis* Kemp, 1922: Shrimps of a taxon resembling this species were reported from shallow-water seagrass beds throughout Moreton Bay, Queensland, by Wadley (1978), as *Periclimenes* nr.

*andamanensis*. Some specimens also referred to this taxon by Wadley, from 3m depth over *Posidonia* beds from the South West Arm, Port Hacking, New South Wales, have also been examined, but unfortunately no second pereopods have been preserved, so the identification can not be fully confirmed.

153. *Periclimenes darwiniensis* Bruce, 1987: First discovered at Weed Reef, Darwin Harbour, Northern Territory, in 1985. This species is now known to be moderately common in intertidal pools in Darwin Harbour (Bruce 1987b) and also occurs in the Gulf of Carpentaria. The species is apparently free-living, and presumably a micropredator.

154. *Periclimenes denticulatus* Nobili, 1906: A single male specimen from Lizard Island, Queensland, lacking both second pereopods, has been referred to this species. The specimen was caught in a trap at 37 m depth (Bruce, 1991a). The species was originally described from Gatawake, Gambier Islands, and subsequently reported only from the Tuamotu and Marshall Islands and the northern South China Sea.

- *Periclimenes goniopora* Bruce, 1989d: This species was included as a *nomen nudum* in Bruce (1983a). A description of this species has been recently published, thereby validating the use of this name (Bruce 1989d). *Periclimenes goniopora* is an associate of *Lobophyllia* and scleractinian corals (*Goniopora*, *Galaxea*, *Porites* and *Montipora*).

155. *Periclimenes franklini* Bruce, 1990b: A deep-water species, collected from about 300 m, at 17° 21'S, 146° 48.52'E in the Coral Sea in 1986. This species, whose host has not been identified, is thought to be probably a gorgonian associate (Bruce 1990b).

156. *Periclimenes laccadivensis* (Alcock and Anderson, 1894): A single female specimen has recently been caught at 720 m depth off Cape Freycinet, Tasmania (Bruce 1991a), and represents one of the few deep-water and southerly components of the Australian pontonine fauna. Previously recorded from the Laccadive Islands, South China Sea, and off Hawaii, it is the most southerly occurrence of a pontonine shrimp with an otherwise Indo-West Pacific distribution. The species is possibly associated with gorgonians.

157. *Periclimenes* sp. nov. a - Bruce, 1991a: A single specimen of a new species has been recorded (currently in press) from a trap at

23 m depth from Chinaman's Ridge, Watson's Bay, Lizard Island, Queensland (Bruce 1991a). This species is known only from a single occurrence, and is thought to be of free-living habits.

158. *Periclimenes mahei* Bruce, 1969: Not previously reported from Australian seas, numerous specimens including ovigerous females were collected from a colony of *Pocillopora damicornis* from Point Quobba, Western Australia, in 1980. This species has been previously recorded only from the Seychelle Islands, Comoro Islands and Zanzibar.

159. *Periclimenes* sp. nov. b - Bruce, 1991a: This species (in press) known only from the holotype specimen collected in a trap at 3.5 m depth at Blue Lagoon, Lizard Island, Queensland (Bruce 1991a). It is probably a commensal species, possibly associated with echinoderms (echinoids?).

160. *Periclimenes venustus* Bruce, 1990d: Numerous examples of this species were collected from Port Essington, Cobourg Peninsula in 1985, mainly from unidentified anemones, but with two lots from *Heliofungia actiniformis*, mostly from unrecorded depths, but some from 2.5 - 3 m depth (Bruce 1991b). Except for its colour pattern, this species is closely similar to *P. holthuisi* Bruce, and it is likely that some of the specimens previously identified as *P. holthuisi*, particularly where the original colour patterns were not recorded, will prove to belong to *P. venustus* on re-examination. *Periclimenes venustus* is also known from Scott Reef, Western Australia and the Philippines (Bruce 1989e).

161. *Periclimenes yaldwyni* Holthuis, 1959: Known only at present from one male and three ovigerous females collected in 1983 from 16-28m depth in Mercury Passage, off Maria Island, Tasmania (Bruce and Kropp 1984). This species was first described from New Zealand material (as *Brachycarpus audouini* Bate 1888), and is one of the small number of carideans occurring in both southern Australian and New Zealand waters.

#### Genus *Periclimenoides* Bruce, 1990c

- *Periclimenoides odontodactylus* (Fujino and Miyake, 1968): This species was referred to in the species list given by Bruce (1983a) under the name of *Periclimenaeus odontodactylus*. The genus is monospecific, and *P. odontodactylus* has been reported from Japan,



Hong Kong and Australian waters only, in association with sponge hosts, (Bruce 1990e).

#### Genus *Platypontonia* Bruce, 1968

162. *Platypontonia brevirostris* (Miers, 1884): This species has not been recorded previously from Australian waters. A pair of specimens were collected by R. Boer from a specimen of *Lopha cristigalli* from 20 m depth on the reef slope of Heron Island, Queensland in 1980. This species was first described from specimens from the Seychelle Islands, collected by the H.M.S. *Alert* Expedition (1882), with further material subsequently also collected from the Seychelle Islands. There have been no reports of the species from other localities.

#### Genus *Pontonia* Costa, 1844

163. *Pontonia stylirostris* Holthius, 1952: This species has not been previously recorded from Australian waters. A single incomplete male specimen, with the characteristic rostrum and minor second pereopod, was found amongst coral rubble from 42 m depth off Townsville, Queensland, at 18° 42'S., 147° 1.0'E by R.A. Birtles in 1979. This species has only been previously reported from Indonesia, between Misool and New Guinea, at 32 m depth, and from Tanganyika and Oman. Its associations have not been identified, but are likely to be ascidians.

#### Genus *Tuleariocaris* Hipeau-Jacquotte, 1965

164. *Tuleariocaris holthuisi* Hipeau-Jacquotte 1965: Not previously recorded from Australian waters, a pair of specimens were found on *Diadema setosum* Leske, at Myora Light, North Stradbroke Island, at 0.5 m depth in September 1967.

#### Genus *Typton* Costa, 1844

165. *Typton dimorphus* Bruce, 1986: A male and ovigerous female, collected from coral rubble, although not necessarily a natural pair, were found in a sample from 5 m depth on Ashmore Reef, Timor Sea, at 12° 15.0'S, 123° 00.0'E in 1984 (Bruce 1986). No other specimens are known. Like other *Typton* species, *T. dimorphus* is likely also to be a sponge associate.

166. *Typton nanus* Bruce, 1988: *Typton nanus* is known only from the female holotype specimen, collected in 1985, from 40-46 m

depth on the Northwest Shelf (Bruce 1987e). Its host remains unidentified, but is presumably a sponge. This shrimp is one of the smallest pontiniine shrimps known, with a postorbital carapace length of only about 1.0 mm.

#### Genus *Vir* Holthius, 1952

167. *Vir orientalis* (Dana, 1852): A single example of this species, the first recorded from Australian waters, was collected by N. Coleman in 1979 from 10 m depth from Osprey Reef, Coral Sea, from an unidentified coral host. The species was first described from the Sulu Sea and was subsequently reported from Kenya, Zanzibar, Seychelle Islands, Andaman Islands, Mariana Islands and the South China Sea.

168. *Vir philippinensis* Bruce and Svoboda, 1984: This species has not been recorded previously from Australian waters. Two specimens were collected from *Pleurogyra sinuosa* from 8 m depth by J.E.N. Veron, from Fitzroy Reef, Queensland, in 1980. A further specimen was collected by T. Fromm, from *Euphyllia* sp., off Lizard Island, Queensland, in 1987. The species was first described from specimens from Cebu, Philippine Islands, and it has since been reported from Okinawa, Ryukyu Islands.

## DISCUSSION

At present, 168 species of pontiniine shrimp, of 46 different genera, are known to occur in Australian waters. Four of these genera, all monospecific, are not yet known to occur outside Australian seas. Of the remaining 42 genera, 17 are also monospecific. As some 308 species have been reported from the Indo-West Pacific region as a whole, about half (54.2%) may be found in Australian waters, and 86% of the known genera are also represented in the Australian fauna.

Of the 168 Australian species, 141 occur on the eastern seaboard, with 49 on the northern and western, and only 6 on the southern coasts. The high figure for the eastern coasts is probably a reflection of the presence of the Great Barrier Reef combined with the increased scientific collecting effort that it has attracted over many years. Only one species, *Anchistus custos*, an associate of pinnid molluscs, occurs in all three regions. Twenty-four species (14.3%) have so far been found to occur in both eastern and north-western regions. Con-

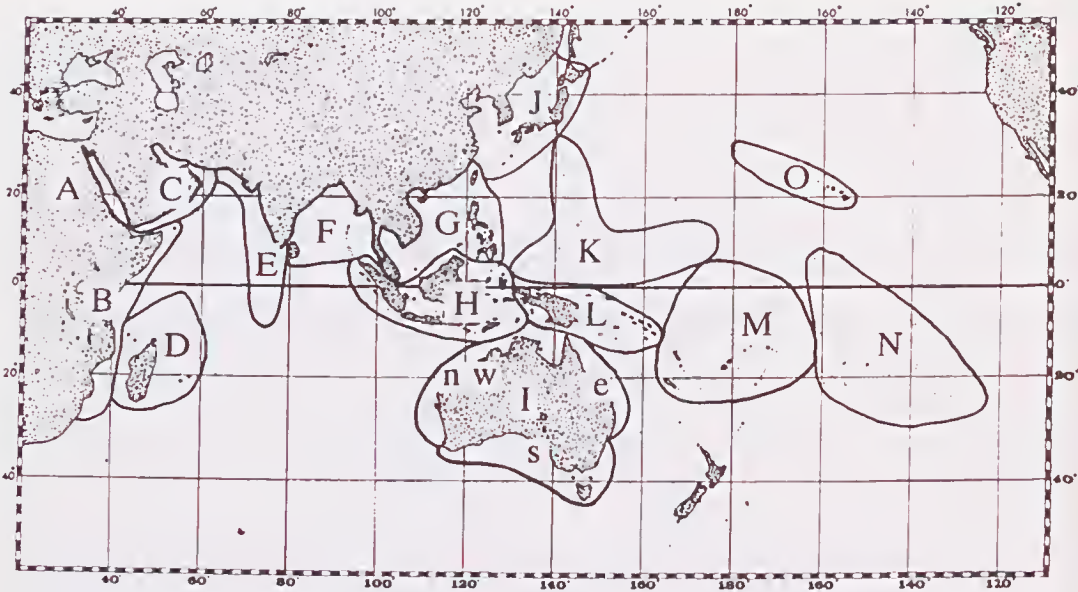


Fig. 1. Subdivision of Indo-Pacific zoogeographic zones, relating to areas described in Table 1. A. Red Sea. B. East Africa. C. Southern Arabia, Arabian Gulf, Gulf of Oman. D. Madagascar, Comoro, Mascarene and Seychelle Islands. E. Western Indian peninsula, Maldiva, Laccadive and Chagos Islands. F. Sri Lanka, Bay of Bengal, Andaman and Nicobar Islands, Burma. G. Malaya, South China Sea, Taiwan, Philippines. H. Indonesia. I. Australia (e, eastern; nw, north-western; s, southern). J. east China, Japan, Ryukyu Islands, Korea. K. Marshall, Caroline and Marianas Islands. L. Papua New Guinea. M. New Caledonia, Fiji, Vanuatu, Tonga, Kiribati, Tuvalu, Samoan and Phoenix Islands. N. Tokelau, Cook, Line, Society, Austral, Tuamotu and Marquesas Islands. O. Hawaiian Islands. P. Eastern Pacific region.

versely, 115 species (168%), including 13 "endemics" (7.7%), are known from the eastern coasts only and 23 species, including 18 "endemics", occur only on the north-western coasts.

Many of the Australian species belong to taxa with very wide Indo-West Pacific distributions. Thirty two species are also known from the Red Sea, while 80 (48.2%) species are known from the east coast of Africa, with 82 (49.4%) from the combined Red Sea-East African region. The central East African region, principally Kenya and Tanzania, has a pontoniine shrimp fauna of 134 species (Bruce 1976), of which 80 species (60%) have so far been found to occur around Australia. The pontoniine fauna of the Pacific Ocean has not yet been adequately examined. The faunas of the extensive reef systems and deeper waters have not yet been generally studied in detail, except in the region of New Caledonia. Diversity appears to decrease in an easterly direction and only 19 species found in Australian waters occur also in the eastern parts of the Indo-West Pacific region (Fig. 1, zones N, O,) but several Indo-West Pacific species have ranges that extend to the eastern American

seaboard. Of the species presently known to do so, six occur in Australian waters (*Alloponotonia iaini*, *Fennera chacei*, *Gnathophylloides mineri*, *Harpiliopsis depressa*, *H. spinigera* and *Periclimenes soror*). These species, which are all commensal associates of other marine invertebrates, also occur in East African waters and therefore have ranges that extend across the whole Indo-Pacific region, but only *G. mineri* has so far been found in the Atlantic region, although *Palaemonella rotumana* has now extended its range through the Suez Canal into the eastern Mediterranean Sea (Holthuis and Gottlieb 1958). No free-living Indo-West Pacific species have yet been reported from the Eastern Pacific region.

As the pontoniine shrimp faunas of Indonesia and New Caledonia have been studied in more detail than many of the adjacent regions, they may be conveniently compared with the fauna of Australia, although all must still be considered incompletely known. Such are the vagaries of field collections that even such an abundant and widely distributed species as *Periclimenes spiniferus* has not yet been formally recorded from New Caledonia, although it is inconceivable that it is absent from the



coral reefs there. The almost equally common *Harpiliopsis beaupresii* has also apparently not been collected. As further collecting is carried out, it is expected that the overlap between the faunas will increase, although all regions may be expected to have some indigenous species. At present, 204 species are known from the combined faunas of Indonesia, Australia and New Caledonia, about two-thirds of the number of species occurring in the whole Indo-West Pacific region, with 87 species from Indonesia (Holthuis 1952; Bruce 1983e; Fransen 1989) and 67 from New Caledonia (Bruce 1990a, 1991b). Eighty-seven of the 168 species found in Australia (49%) are also found in Indonesia or adjacent parts of Papua-New Guinea. The Siboga-Snellius collections in Indonesian waters and more recent collections in New Caledonian waters have indicated that a number of pontiniine shrimp occur in depths of over 100 m. These species are particularly poorly represented in the Australian fauna due to lack of deep-water sampling. At present only *Periclimenes alcocki*, *P. franklini*, *P. hertwigi*, *P. laccadivensis* and *Mesopontonia gorgonicola* are known from these depths, 2.8% of the Australian fauna, with *P. laccadivensis* reaching the greatest depth at about 720 m. In Indonesia, only four species occur in 100 m or over, representing 3.4 % of the pontiniine fauna but nine species, 15%, of the New Caledonian fauna have been found in these depths.

Of the 33 species that are presently known only from Australian waters, it is difficult to consider that many of these are truly endemic, that is, with a distribution limited to Aus-

tralian waters. Due to the small size and cryptic behaviour of most of species, it is probable that many have so far been merely overlooked in other parts of the Indo-West Pacific region. This applies particularly to the recently described taxa from the northern and eastern coasts of Australia, which seem highly likely to be components of the general Indo-West Pacific marine fauna. Species recently described from the Great Barrier Reef have already been found as far away as the Ryukyu Islands (*Periclimenes magnificus*: Bruce 1979; Nomura *et al.* 1988). Species from the south are more likely to be truly endemic and possibly members of an earlier marine Gondwana fauna. Species such as *Periclimenes aesopius*, the first pontiniine shrimp to be described from Australian waters (Bate 1863), is still only known from St Vincent Gulf, South Australia. It seems probable that it is restricted to this region, and may be a true relict. Another candidate as an endemic species is *Pontonia minuta*, first described by Baker (1907) from a single specimen from an unrecorded host, with a further occurrence at Meroo Point, New South Wales, indicating a rather less restricted distribution than *P. aesopius*. *Periclimenes aesopius* is a conspicuous associate of anemones. *Pontonia minuta* is undoubtedly a commensal species but probably not a true *Pontonia s. str.*, and its host remains to be identified; polychaete worms have been suggested. Once the host has been identified, the distribution of *P. minuta*, which is probably dependent on that of its host and closely related species, may be rapidly clarified.

Table 1. The Indo-West Pacific distributions of the Australian pontiniine shrimp fauna (+ = species present; O = species presently known only from Australian waters; ? = uncertain record)

SPECIES	LOCALITY															
	A	B	C	D	E	F	G	H	I nw e s	J	K	L	M	N	O	P
1. <i>Allopontonia iaini</i>	.	+	.	.	.	.	.	.	.	+	.	.	.	.	.	+
2. <i>Anapontonia denticauda</i>	.	+	.	+	.	.	.	+	.	+	.	.	.	.	.	.
3. <i>Anchistus australis</i>	.	.	.	.	.	.	.	.	.	+	+	.	.	.	.	.
4. <i>Anchistus custoides</i>	.	.	.	.	.	.	.	.	.	+	+	.	+	+	.	.
5. <i>Anchistus custos</i>	+	+	+	+	+	+	+	.	.	+	+	.	+	.	.	.
6. <i>Anchistus demani</i>	.	+	.	+	.	+	+	.	.	+	.	+	.	.	.	.
7. <i>Anchistus gravieri</i>	.	.	.	.	.	.	.	.	.	+	.	+	+	.	.	.
8. <i>Anchistus miersi</i>	+	+	.	+	+	+	+	.	.	+	+	+	+	.	.	.
9. <i>Anchistus pectinis</i>	.	+	.	.	.	+	.	.	.	+	.	.	+	.	.	.
10. <i>Apopontonia dubia</i>	.	.	.	.	.	.	.	.	.	+	.	.	.	+	.	.
11. <i>Apopontonia falcirostris</i>	.	.	.	+	.	.	.	.	.	+	.	.	.	.	.	.
12. <i>Apopontonia tridentata</i>	.	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.
13. <i>Carinopontonia paucipes</i>	.	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.
14. <i>Chernocaris placunae</i>	.	.	.	.	.	.	+	.	.	+	.	.	.	.	.	.
15. <i>Conchodytes kemp</i>	.	.	.	.	.	+	+	.	.	+	.	.	.	.	.	.
16. <i>Conchodytes maculatus</i>	.	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.
17. <i>Conchodytes meleagrinae</i>	+	+	+	+	+	+	+	.	.	+	+	+	+	+	+	.

SPECIES	LOCALITY															
	A	B	C	D	E	F	G	H	I nw e s	J	K	L	M	N	O	P
18. <i>Conchodytes monodactylus</i>	.	.	.	.	.	.	.	+	+	+	+	.	.	.	.	.
19. <i>Conchodytes nipponensis</i>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
20. <i>Conchodytes tridacnae</i>	+	+	.	+	+	+	+	+	+	.	+	+	.	+	.	.
21. <i>Coralliocaris brevirostris</i>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
22. <i>Coralliocaris graminea</i>	+	+	.	+	.	+	+	+	+	+	+	+	.	.	.	+
23. <i>Coralliocaris superba</i>	+	+	.	+	+	+	.	+	.	+	+	+	.	+	.	.
24. <i>Coralliocaris venusta</i>	+	+	.	+	+	.	.	+	.	.	+	+	.	.	.	.
25. <i>Coralliocaris viridis</i>	.	+	.	.	+	+	.	+	.	+	.	.	.	.	.	.
26. <i>Dasella ansoni</i>	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.	.
27. <i>Dasella brucei</i>	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.	.
28. <i>Dasycares ceratops</i>	.	+	.	.	.	.	.	+	.	+	.	.	.	.	.	.
29. <i>Dasycares zanzibarica</i>	.	.	.	.	.	.	.	.	.	.	.	.	.	+	.	.
30. <i>Epipontonia anceps</i>	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.	.
31. <i>Exopontonia malleatrix</i>	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.	.
32. <i>Fennera chacei</i>	.	+	.	+	+	.	.	.	.	+	.	.	.	.	.	+
33. <i>Gnathophylloides mineri</i>	.	+	.	+	.	.	.	.	.	+	.	.	.	+	.	+
34. <i>Gnathophylloides robustus</i>	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.	+
35. <i>Hamodactyloides iocompletus</i>	+	+	.	+	.	.	.	.	.	+	.	.	.	+	.	.
36. <i>Hamodactylus aqabai</i>	.	+	.	.	.	.	.	.	.	+	.	.	.	.	.	.
37. <i>Hamodactylus baschmai</i>	.	+	.	+	.	.	.	+	+	+	.	.	.	+	.	.
38. <i>Hamodactylus noumeae</i>	.	+	.	.	.	.	.	+	+	+	.	.	.	+	.	.
39. <i>Hamopontonia corallicola</i>	.	.	.	.	.	.	.	+	+	+	.	.	.	.	.	.
40. <i>Hamopontonia essingtoni</i>	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.	.
41. <i>Harpiliopsis beaupresii</i>	+	+	+	+	+	+	+	+	+	.	+	.	.	.	+	+
42. <i>Harpiliopsis depressa</i>	+	+	+	+	+	+	+	+	+	.	+	.	.	+	.	+
43. <i>Harpiliopsis spinigera</i>	.	+	.	+	+	+	+	+	+	.	+	.	.	+	.	+
44. <i>Ischnopontonia lophos</i>	.	+	.	+	+	+	.	+	+	.	+	.	.	+	.	+
45. <i>Jocaste japonica</i>	+	+	+	+	+	+	+	+	+	.	+	.	.	+	.	.
46. <i>Jocaste lucina</i>	+	+	+	+	+	+	+	+	+	.	+	.	.	+	+	+
47. <i>Mesopontonia gargoniophilo</i>	.	.	.	.	.	.	.	+	.	+	.	.	.	.	.	.
48. <i>Miopontonia yongei</i>	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.	.
49. <i>Onycocaridella monodoa</i>	.	.	.	+	.	.	.	.	.	+	.	.	.	.	.	.
50. <i>Onycocaridella prima</i>	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.	.
51. <i>Onycocaridites anomodactylus</i>	.	.	.	.	.	.	.	+	.	+	.	.	.	.	.	.
52. <i>Onycocaris amakusensis</i>	.	+	.	.	.	.	.	.	.	+	.	.	.	.	.	.
53. <i>Onycocaris oligodentata</i>	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.
54. <i>Onycocaris quadratophthalma</i>	.	.	.	.	.	.	.	+	.	+	.	.	.	.	+	.
55. <i>Onycocaris spinosa</i>	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.
56. <i>Orhopontonia ornata</i>	.	+	.	.	.	.	.	.	.	+	.	.	.	.	.	.
57. <i>Palaemonella pottsi</i>	.	+	.	.	.	.	.	+	+	.	+	.	.	+	.	.
58. <i>Palaemonella rotumana</i>	+	+	+	+	+	+	+	+	+	.	+	.	+	+	.	+
59. <i>Palaemonella spinulata</i>	.	+	.	+	.	.	.	.	.	+	.	.	.	.	.	.
60. <i>Paranchistus armatus</i>	.	.	.	.	.	.	.	.	+	.	.	.	.	+	+	.
61. <i>Paranchistus pycnodontae</i>	.	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.
62. <i>Parapontonia nudirostris</i>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
63. <i>Paratypton siebenrocki</i>	+	+	.	+	.	.	.	.	.	+	.	.	.	+	.	.
64. <i>Periclimenaeus arabicus</i>	.	+	+	.	+	+	.	.	.	+	.	.	.	.	.	.
65. <i>Periclimenaeus ardeae</i>	.	+	.	.	.	.	.	.	.	+	.	.	.	+	.	.
66. <i>Periclimenaeus bidentatus</i>	+	+	.	.	.	.	.	.	.	+	.	.	.	+	.	.
67. <i>Periclimenaeus diplosomatis</i>	.	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.
68. <i>Periclimenaeus djiboutensis</i>	+	+	.	+	.	.	.	.	.	+	.	.	.	.	.	.
69. <i>Periclimenaeus gorgonidarum</i>	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.
70. <i>Periclimenaeus hecate</i>	.	+	+	+	+	.	.	+	.	+	.	.	.	.	.	.
71. <i>Periclimenaeus orbitospinatus</i>	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.	.
72. <i>Periclimenaeus orontes</i>	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.	.
73. <i>Periclimenaeus pachydentatus</i>	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.	.
74. <i>Periclimenaeus rastrifer</i>	.	.	.	.	.	.	.	+	.	+	.	.	.	+	.	.
75. <i>Periclimenaeus rhodope</i>	.	+	+	.	.	.	.	.	.	+	.	.	.	.	.	.
76. <i>Periclimenaeus tridentatus</i>	.	+	.	.	.	.	.	+	.	+	.	.	.	.	.	+
77. <i>Periclimenaeus tuomotae</i>	.	+	.	.	.	.	.	.	.	+	.	.	.	.	.	.
78. <i>Periclimenes oesopius</i>	.	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.
79. <i>Periclimenes affinis</i>	.	.	.	.	.	.	.	+	+	.	?	.	.	+	.	.
80. <i>Periclimenes agag</i>	+	.	.	.	.	+	.	+	.	+	.	.	.	+	.	.
81. <i>Periclimenes alcocki</i>	.	.	.	+	+	.	+	.	.	+	.	.	.	+	.	.
82. <i>Periclimenes alegrias</i>	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.	.
83. <i>Periclimenes amboinensis</i>	.	.	.	.	.	.	.	+	.	+	.	.	.	+	.	.
84. <i>Periclimenes amymone</i>	.	.	.	.	.	+	+	+	+	.	.	.	+	+	.	.
85. <i>Periclimenes anacanthus</i>	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.	.
86. <i>Periclimenes andamanensis</i>	.	.	.	+	+	.	.	.	.	+	.	.	.	.	.	.
87. <i>Periclimenes attenuatus</i>	.	.	.	.	.	.	.	+	.	+	.	.	.	+	.	.
88. <i>Periclimenes brevicarpalis</i>	+	+	+	+	+	+	+	+	+	+	.	.	+	+	+	.
89. <i>Periclimenes brockettii</i>	.	.	.	.	+	.	.	.	.	+	.	.	.	.	.	.
90. <i>Periclimenes cf. calmani</i>	.	.	.	.	.	.	.	+	.	.	.	.	.	.	.	.
91. <i>Periclimenes carinidactylus</i>	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.	.
92. <i>Periclimenes ceratophthalmus</i>	.	+	.	+	+	.	.	+	.	+	.	.	.	+	+	.
93. <i>Periclimenes colemani</i>	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.	.



Additions to Pontiniine shrimp fauna

SPECIES	LOCALITY															
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
									nw	e	s					
94. <i>Periclimenes commensalis</i>	.	+	.	+	.	.	+	+	.	+	.	+	+	.	.	.
95. <i>Periclimenes consobrinus</i>	.	+	.	+	.	.	+	+	.	+	.	.	.	.	.	.
96. <i>Periclimenes cornutus</i>	.	.	.	.	+	.	.	+	.	+	.	.	.	.	.	.
97. <i>Periclimenes cristimanus</i>	.	.	.	.	.	.	+	.	.	+	.	+	.	.	.	.
98. <i>Periclimenes darwiniensis</i>	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.	.
99. <i>Periclimenes denticulatus</i>	.	.	.	.	.	.	.	+	.	+	.	+	.	+	.	.
100. <i>Periclimenes diversipes</i>	+	+	+	+	+	+	+	.	+	+	.	.	.	.	.	.
101. <i>Periclimenes elegans</i>	+	+	+	+	+	+	+	+	+	+	.	+	.	.	.	.
102. <i>Periclimenes franklini</i>	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.	.
103. <i>Periclimenes galene</i>	.	+	.	.	.	.	.	+	.	+	.	.	.	.	.	.
104. <i>Periclimenes goniopora</i>	.	+	.	+	.	.	.	.	.	+	.	.	.	.	.	.
105. <i>Periclimenes granulimanus</i>	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.
106. <i>Periclimenes hertwigi</i>	.	.	.	.	.	.	.	+	.	+	.	.	+	.	.	.
107. <i>Periclimenes holthuisi</i>	+	+	.	+	+	+	+	+	+	+	.	+	+	+	.	.
108. <i>Periclimenes imperator</i>	+	+	.	+	.	.	.	.	.	+	.	+	+	+	.	.
109. <i>Periclimenes incertus</i>	.	+	+	+	+	+	+	+	+	+	.	.	+	.	+	.
110. <i>Periclimenes indicus</i>	.	.	.	.	.	+	+	+	.	+	.	.	.	.	.	.
111. <i>Periclimenes inornatus</i>	.	+	.	+	+	+	+	+	.	+	.	+	.	+	.	.
112. <i>Periclimenes investigatoris</i>	.	.	+	.	.	.	.	+	.	+	.	.	.	.	.	.
113. <i>Periclimenes kempfi</i>	+	+	.	.	.	+	+	+	+	+	.	.	.	+	.	.
114. <i>Periclimenes kororensis</i>	.	.	.	.	.	.	.	+	.	+	.	+	.	.	.	.
115. <i>Periclimenes laccadivensis</i>	.	.	.	.	+	.	+	.	.	+	+	.	.	.	.	+
116. <i>Periclimenes</i> sp. nov. a	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.	.
117. <i>Periclimenes lanipes</i>	.	+	.	+	.	+	+	+	.	+	.	.	+	.	.	.
118. <i>Periclimenes longirostris</i>	+	+	.	+	+	+	+	+	.	+	.	+	+	.	.	.
119. <i>Periclimenes lutescens</i>	+	+	.	+	+	+	+	+	.	+	.	+	+	+	?	.
120. <i>Periclimenes madreporae</i>	.	.	.	+	.	.	.	.	.	+	.	+	+	.	.	.
121. <i>Periclimenes magnificus</i>	.	.	.	.	.	.	+	+	.	+	.	.	.	.	.	.
122. <i>Periclimenes muhei</i>	.	+	.	+	.	.	.	.	+	+	.	.	.	.	.	.
123. <i>Periclimenes nilandensis</i>	.	+	.	+	+	.	+	+	.	+	.	.	.	+	.	.
124. <i>Periclimenes ornatellus</i>	.	.	.	.	.	.	.	.	.	+	.	+	.	.	.	.
125. <i>Periclimenes ornatus</i>	+	+	.	.	.	.	+	+	.	+	.	+	.	.	.	.
126. <i>Periclimenes pectiniferus</i>	.	.	.	.	.	.	.	+	.	+	.	.	.	.	.	.
127. <i>Periclimenes platycheles</i>	.	.	.	.	.	.	+	.	.	+	.	.	+	+	.	.
128. <i>Periclimenes</i> sp. nov. b	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.	.
129. <i>Periclimenes psamathe</i>	.	+	.	+	+	+	+	+	.	+	.	+	+	+	.	.
130. <i>Periclimenes ruber</i>	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.	.
131. <i>Periclimenes seychellensis</i>	+	+	+	+	+	+	+	+	.	+	.	+	+	+	.	.
132. <i>Periclimenes soror</i>	+	+	+	+	+	+	+	+	.	+	.	+	+	+	+	+
133. <i>Periclimenes spiniferus</i>	.	.	.	+	+	+	+	+	+	+	.	+	+	+	+	+
134. <i>Periclimenes tenuipes</i>	+	+	.	+	+	+	+	+	+	+	.	+	+	+	+	+
135. <i>Periclimenes tenuis</i>	.	.	.	.	.	.	.	+	.	+	.	+	+	.	.	.
136. <i>Periclimenes toloensis</i>	.	+	.	.	.	.	+	.	+	+	.	.	.	.	.	.
137. <i>Periclimenes venustus</i>	.	.	.	.	.	.	.	.	+	.	.	?	.	.	.	.
138. <i>Periclimenes yaldwyni</i>	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.
139. <i>Periclimenes zanzibaricus</i>	.	+	.	+	.	.	.	.	.	+	.	.	.	.	.	.
140. <i>Periclimenoides odontodactylus</i>	.	.	.	.	.	.	.	.	.	+	+	.	+	.	.	.
141. <i>Philarius gerlachei</i>	+	+	+	+	+	+	+	+	.	+	.	+	+	+	+	+
142. <i>Philarius imperialis</i>	+	+	.	+	.	.	.	+	+	+	.	+	+	+	+	+
143. <i>Philarius lifuensis</i>	.	.	.	.	.	.	.	.	.	+	.	.	.	+	.	.
144. <i>Platyecaris latirostris</i>	.	+	.	+	.	.	.	+	+	.	.	+	+	.	.	.
145. <i>Platypontonia brevirostris</i>	.	.	.	.	.	.	.	.	.	+	.	+	.	.	.	.
146. <i>Platypontonia furtiva</i>	.	+	.	.	.	.	.	+	+	.	.	+	.	+	.	.
147. <i>Pontonia urdeue</i>	.	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.
148. <i>Pontonia kutoi</i>	.	+	.	.	.	.	.	+	+	+	.	+	.	+	.	.
149. <i>Pontonia minuta</i>	.	.	.	.	.	.	.	.	.	O	O	.	.	.	.	.
150. <i>Pontonia okai</i>	.	+	+	.	.	+	+	+	.	+	.	.	.	.	.	.
151. <i>Pontonia sibogae</i>	.	.	+	+	.	.	.	+	.	+	.	.	.	.	.	.
152. <i>Pontonia stylirostris</i>	.	+	+	.	.	.	.	.	.	+	.	.	.	.	.	.
153. <i>Pontonides</i> sp.	+	+	.	+	.	.	.	.	.	+	.	+	.	.	+	.
154. <i>Pontoniopsis comanthi</i>	+	+	.	+	.	.	.	+	.	+	.	+	.	+	.	.
155. <i>Propontonia pellucida</i>	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.
156. <i>Stegopontonia commensalis</i>	.	+	.	+	.	.	.	.	.	+	.	+	.	+	.	+
157. <i>Thaumastocaris streptopus</i>	+	+	.	+	.	.	+	+	.	+	.	+	.	.	.	.
158. <i>Tuleariocaris holthuisi</i>	.	+	.	+	.	.	.	.	.	+	.	.	.	.	.	+
159. <i>Typton anomalus</i>	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.	.
160. <i>Typton australis</i>	.	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.
161. <i>Typton bawii</i>	.	+	.	.	.	.	.	.	.	+	.	.	.	.	.	.
162. <i>Typton dentatus</i>	.	.	.	.	.	.	.	.	.	+	.	.	.	.	.	.
163. <i>Typton dimorphus</i>	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.	.
164. <i>Typton nanus</i>	.	.	.	.	.	.	.	.	O	.	.	.	.	.	.	.
165. <i>Typton wasini</i>	.	+	.	+	.	.	.	.	.	+	.	.	.	.	.	.
166. <i>Vir orientalis</i>	.	+	.	+	.	+	+	+	.	+	.	+	.	.	.	+
167. <i>Vir philippinensis</i>	.	.	.	.	.	.	+	.	.	+	.	.	.	.	.	.
168. <i>Zenopontonia noverca</i>	.	+	.	+	.	.	.	.	.	+	.	.	.	+	.	.

Table 2. The pontonine shrimp faunae of Indonesia (I), Australia (A) and New Caledonia (NC). (+ = species present; O = not yet known outside designated areas; X = species occurring in depths of more than 100 m)

SPECIES	LOCALITY			SPECIES	LOCALITY		
	I.	A.	NC		I.	A.	NC
1. <i>Alloponotonia iaini</i> Bruce, 1972	-	+	-	79. <i>P. diplosomatis</i> Bruce, 1980	-	O	-
2. <i>Alloponotonia disparostris</i> Bruce, 1990	-	-	+	80. <i>P. djiboutensis</i> Bruce, 1970	-	+	-
3. <i>Anapontonia denticauda</i> Bruce, 1966	-	+	-	81. <i>P. gorgonidarum</i> (Balss, 1913)	-	+	-
4. <i>Anchisius australis</i> Bruce, 1977	+	+	+	82. <i>P. hecate</i> (Nobili, 1904)	+	+	-
5. <i>A. custoides</i> Bruce, 1977	+	+	-	83. <i>P. holthuisi</i> Bruce, 1969	O	-	-
6. <i>A. custos</i> (Forskål, 1775)	+	+	-	84. <i>P. minutus</i> Holthuis, 1952	+	-	-
7. <i>A. demani</i> Kemp, 1922	+	+	+	85. <i>P. nobilii</i> Bruce, 1974	+	-	-
8. <i>A. gravieri</i> Kemp, 1922	-	+	+	86. <i>P. orbitospinatus</i> Bruce, 1969	-	O	-
9. <i>A. miersi</i> (De Man, 1888)	+	+	+	87. <i>P. orantes</i> Bruce, 1986	-	O	-
10. <i>A. pectinis</i> Kemp, 1925	-	+	+	88. <i>P. pachydentatus</i> Bruce, 1969	-	O	-
11. <i>Apapontonia dubia</i> Bruce, 1981	-	+	+	89. <i>P. rustriifer</i> Bruce, 1980	-	+	+
12. <i>A. falcistrostris</i> Bruce, 1977	-	+	-	90. <i>P. rhodope</i> (Nobili, 1904)	-	+	-
13. <i>A. tridentata</i> Bruce, 1988	-	O	-	91. <i>P. spongicola</i> Holthuis, 1952	O	-	-
14. <i>Aruiapontonia odontorhyncha</i> Fujino and Miyake, 1970	+	+	+	92. <i>P. tridentatus</i> (Miers, 1884)	+	+	-
15. <i>Carinopontonia paucipes</i> Bruce, 1988	-	O	-	93. <i>P. truncatus</i> (Rathbun, 1906)	+	-	-
16. <i>Chernocaris placunae</i> Johnson, 1967	-	+	-	94. <i>P. tuamotae</i> Bruce, 1969	-	O	-
17. <i>Conchodytes kempii</i> Bruce, 1989	+	+	-	95. <i>Periclimenes aesopius</i> (Bate, 1863)	-	+	-
18. <i>C. muculatus</i> Bruce, 1989	-	O	-	96. <i>P. affinis</i> (Zehntner, 1894)	-	+	+
19. <i>C. meleagrinae</i> Peters, 1852	+	+	+	97. <i>P. agag</i> Kemp, 1922	-	+	+
20. <i>C. manodactylus</i> Holthuis, 1952	+	+	-	98. <i>P. alcocki</i> Kemp, 1922	-	O	-
21. <i>C. nipponensis</i> (De Haan, 1844)	-	+	-	99. <i>P. alegricus</i> Bruce, 1986	-	+	-
22. <i>C. tridacnae</i> Peters, 1852	+	+	+	100. <i>P. ambainensis</i> (De Man, 1888)	+	+	+
23. <i>Coralliocaris brevirastri</i> Borradaile, 1898	-	+	-	101. <i>P. amyenne</i> De Man, 1902	+	+	+
24. <i>C. graminea</i> (Dana, 1852)	+	+	+	102. <i>P. unacanthus</i> Bruce, 1989	-	O	-
25. <i>C. superba</i> (Dana, 1852)	+	+	+	103. <i>P. andamanensis</i> Kemp, 1922	+	+	-
26. <i>C. venusta</i> Kemp, 1922	+	+	-	104. <i>P. attenuatus</i> Bruce, 1971	+	+	-
27. <i>C. viridis</i> Bruce, 1974	+	+	-	105. <i>P. brevicarpalis</i> (Schenkel, 1902)	+	+	+
28. <i>Dasella ansoni</i> Bruce, 1983	-	O	-	106. <i>P. brockettii</i> Borradaile, 1915	-	+	-
29. <i>D. brucei</i> Berggren, 1990	-	O	-	107. <i>P. bracki</i> (De Man, 1888)	O	-	-
30. <i>Dasycares ceratops</i> Holthuis, 1952	+	O	-	108. <i>P. calmani</i> Tattersall, 1921	+	-	-
31. <i>D. symbiotes</i> Kemp, 1922	-	-	+	109. <i>P. carinidactylus</i> Bruce, 1969	-	O	-
32. <i>D. zanzibarica</i> Bruce, 1973	-	+	+	110. <i>P. ceratophthalmus</i> Borradaile, 1915	+	+	-
33. <i>Epipantonia unceps</i> Bruce, 1983	-	O	-	111. <i>P. colemani</i> Bruce, 1975	-	O	-
34. <i>Exopontonia malleatrix</i> Bruce, 1987	-	O	-	112. <i>P. commensalis</i> Borradaile, 1915	+	+	+
35. <i>Fennera chacei</i> Holthuis, 1951	-	+	-	113. <i>P. cansohrinus</i> (De Man, 1902)	-	+	-
36. <i>Gnathophylloides mineri</i> Schmitt, 1933	-	+	-	114. <i>P. cornutus</i> Borradaile, 1915	-	+	-
37. <i>G. robustus</i> Bruce 1973	-	O	-	115. <i>P. cristimanus</i> Bruce, 1965	-	+	-
38. <i>Hamodactylodes incompletus</i> (Holthuis, 1953)	+	+	-	116. <i>P. darwinensis</i> Bruce, 1987	-	O	-
39. <i>Hamodactylus agabai</i> Bruce and Svoboda, 1983	-	+	-	117. <i>P. denticulatus</i> Nobili, 1906	-	+	-
40. <i>H. boschmai</i> Holthuis, 1952	+	+	+	118. <i>P. digitulus</i> Kemp, 1922	+	-	-
41. <i>H. noumeae</i> Bruce, 1970	-	+	+	119. <i>P. diversipes</i> Kemp, 1922	-	+	-
42. <i>Hamopontonia corallicola</i> , Bruce, 1970	+	+	+	120. <i>P. elegans</i> (Paulson, 1875)	+	+	-
43. <i>H. exsingtoni</i> Bruce, 1986	-	O	-	121. <i>P. franklini</i> Bruce, 1990	-	xO	-
44. <i>Harpiliopsis beaupresii</i> (Audouin, 1825)	+	+	-	122. <i>P. fujinoi</i> Bruce, 1990	-	-	xO
45. <i>H. depressa</i> (Stimpson, 1860)	+	+	+	123. <i>P. gulene</i> Holthuis, 1952	+	+	-
46. <i>H. spinigera</i> (Ortmann, 1890)	+	+	+	124. <i>P. gonioporae</i> Bruce, 1990	-	+	-
47. <i>Ischnopontonia lophos</i> (Barnard, 1962)	-	+	-	125. <i>P. grandis</i> (Stimpson, 1860)	+	-	-
48. <i>Isoptontonia platycheles</i> Bruce, 1982	-	+	O	126. <i>P. gronulimanus</i> Bruce, 1978	-	+	-
49. <i>Jocaste japonica</i> (Ortmann, 1890)	+	+	+	127. <i>P. hertwigi</i> Balss, 1913	x	x	x
50. <i>J. lucina</i> (Nobili, 1901)	+	+	+	128. <i>P. holthuisi</i> Bruce, 1969	+	+	+
51. <i>Mesopontonia gorgoniophila</i> Bruce, 1967	-	x	-	129. <i>P. imperator</i> Bruce, 1967	-	+	+
52. <i>M. gracilicarpus</i> Bruce, 1990	-	-	x	130. <i>P. incertus</i> Borradaile, 1915	+	+	+
53. <i>Miopontonia yongei</i> Bruce, 1985	-	O	-	131. <i>P. indius</i> (Kemp, 1915)	+	+	-
54. <i>Onycoecaridella mnodoa</i> Fujino and Miyake, 1969	-	+	-	132. <i>P. inornatus</i> Kemp, 1922	+	+	-
55. <i>O. prima</i> Bruce, 1981	-	+	-	133. <i>P. investigatoris</i> Kemp, 1922	-	+	-
56. <i>O. stenolepis</i> Holthuis, 1952	+	-	-	134. <i>P. ischiopsinosus</i> Bruce, 1990	-	-	O
57. <i>Onycoecaridites anomodactylus</i> Bruce 1987	-	O	-	135. <i>P. jugalis</i> Holthuis, 1952	+	-	-
58. <i>Onycoecaris amakusensis</i> Fujino and Miyake, 1969	-	+	-	136. <i>P. kempii</i> Bruce, 1969	-	+	-
59. <i>O. longirostris</i> Bruce, 1980	-	-	O	137. <i>P. kororensis</i> Bruce, 1977	-	+	-
60. <i>O. oligdentata</i> Fujino and Miyake 1969	-	+	-	138. <i>P. laccadivensis</i> (Alcock and Anderson, 1894)	-	x	-
61. <i>O. quadratophthalma</i> (Balss, 1921)	-	+	-	139. <i>P. sp. nov. a</i> - Bruce, 1991a	-	O	-
62. <i>O. spinosa</i> Fujino and Miyake, 1969	-	+	-	140. <i>P. lanipes</i> Kemp, 1922	-	+	+
63. <i>Orthopontonia ornata</i> (Bruce, 1969)	-	+	-	141. <i>P. latipollex</i> Kemp, 1922	x	-	-
64. <i>Palaemonella lata</i> Kemp, 1922	+	-	-	142. <i>P. longirastri</i> (Borradaile, 1915)	-	+	-
65. <i>P. dolichodactylus</i> Bruce, 1990	-	-	O	143. <i>P. lutescens</i> auct.	+	+	-
66. <i>P. pottsii</i> (Borradaile, 1915)	+	+	-	144. <i>P. madreporae</i> Bruce, 1969	-	+	-
67. <i>P. rotumana</i> (Borradaile, 1898)	+	+	+	145. <i>P. magnificus</i> Bruce, 1979	+	+	-
68. <i>P. spinulata</i> Yokoya, 1956	-	+	-	146. <i>P. mahei</i> Bruce, 1969	-	+	-
69. <i>P. tenuipes</i> Dana, 1852	+	-	-	147. <i>P. nilandensis</i> Borradaile, 1915	+	+	-
70. <i>Paranchisius ornatulus</i> (H. Milne-Edwards, 1837)	+	+	-	148. <i>P. novaecaledoniae</i> Bruce, 1968	-	+	+
71. <i>P. pycnodontae</i> Bruce, 1978	-	O	-	149. <i>P. ornotellus</i> Bruce, 1979	-	+	-
72. <i>P. sereni</i> Bruce, 1983	O	-	-	150. <i>P. ornatus</i> Bruce, 1969	+	+	-
73. <i>Parapontonia nudirastris</i> Bruce, 1968	-	+	+	151. <i>P. parvispinatus</i> Bruce, 1990	-	-	xO
74. <i>Paratypton siebenrockii</i> Balss, 1914	+	+	-	152. <i>P. porvus</i> Borradaile, 1898	+	-	-
75. <i>Periclimenaeus arabicus</i> (Calman, 1939)	-	+	+	153. <i>P. pectiniferus</i> Holthuis, 1952	+	+	-
76. <i>P. ardeae</i> Bruce, 1970	-	+	-	154. <i>P. plutycheles</i> Holthuis, 1952	+	+	-
77. <i>P. arthroactylus</i> Holthuis, 1952	O	-	-	155. <i>P. sp. nov. h</i> - Bruce, 1991b	-	O	-
78. <i>P. bidentatus</i> Bruce, 1970	-	+	+	156. <i>P. psamathe</i> (De Man, 1902)	+	+	+
				157. <i>P. richeri</i> Bruce, 1990	-	-	xO



SPECIES	LOCALITY		
	I.	A.	NC
158. <i>P. ruber</i> Bruce, 1982	-	O	-
159. <i>P. seychellensis</i> , Borradaile, 1915	+	+	+
160. <i>P. sibogae</i> Holthuis, 1952	O	-	-
161. <i>P. soror</i> Nobili, 1904	+	+	+
162. <i>P. spiniferus</i> De Man, 1902	+	+	-
163. <i>P. tenuipes</i> Borradaile, 1898	+	+	+
164. <i>P. tenuirostris</i> Bruce, 1990	-	-	O
165. <i>P. tenuis</i> Bruce, 1969	+	+	-
166. <i>P. toloensis</i> Bruce, 1969	-	+	-
167. <i>P. ununguiculatus</i> Bruce, 1990	-	-	xO
168. <i>P. vaubani</i> Bruce, 1990	-	-	xO
169. <i>P. venustus</i> Bruce, 1990	-	+	-
170. <i>P. yaldwyni</i> Holthuis, 1959	-	+	-
171. <i>P. zanzibaricus</i> Bruce, 1969	-	+	-
172. <i>Periclimenoides odontodactylus</i> (Fujino and Miyake, 1968)	-	+	-
173. <i>Philarius gerlachei</i> (Nobili, 1905)	+	+	-
174. <i>P. imperialis</i> (Kubo, 1940)	+	+	-
175. <i>P. lifuensis</i> (Borradaile, 1898)	-	+	+
176. <i>Platycaris latirostris</i> Holthuis, 1952	+	+	+
177. <i>Platypontonia hrevirostris</i> (Miers, 1884)	-	+	-
178. <i>P. hyotis</i> Hipeau-Jacquotte, 1971	+	-	-
179. <i>Pliopontonia furtiva</i> Bruce, 1973	+	+	+
180. <i>Pontonia ardeae</i> Bruce, 1981	-	O	-

SPECIES	LOCALITY		
	I.	A.	NC
181. <i>Pontonia ascidicola</i> Borradaile, 1898	x	-	-
182. <i>P. katoi</i> Kubo, 1940	+	+	+
183. <i>P. minuta</i> Baker, 1907	-	O	-
184. <i>P. monniti</i> Bruce, 1990	-	-	xO
185. <i>P. okai</i> Kemp, 1922	+	+	-
186. <i>P. sibogae</i> Bruce, 1972	+	+	-
187. <i>P. stylosrostris</i> Holthuis, 1952	+	+	-
188. <i>Pontonides unciger</i> Calman, 1939	+	+	-
189. <i>Pontonides</i> sp.	-	+	+
190. <i>Pontoniopsis comanthi</i> Borradaile, 1915	+	+	-
191. <i>Propontonia pellucida</i> Bruce, 1969	-	+	-
192. <i>Stegopontonia commensalis</i> Nobili, 1906	-	+	+
193. <i>Thaumastocaris streptopus</i> Kemp, 1922	+	+	+
194. <i>Tuleariocaris holthuisi</i> Hipeau-Jacquotte, 1965	-	+	-
195. <i>Typton anomalus</i> (Bruce, 1979)	-	O	-
196. <i>T. australis</i> Bruce, 1973	-	O	-
197. <i>T. bawni</i> Bruce, 1972	-	O	-
198. <i>T. dentatus</i> Fujino and Miyake, 1969	-	+	-
199. <i>T. dimorphus</i> Bruce, 1986	-	+	-
200. <i>T. nanus</i> Bruce, 1987	-	O	-
201. <i>T. wasini</i> Bruce, 1977	-	O	-
202. <i>Vir orientalis</i> (Dana, 1852)	+	+	-
203. <i>V. philippinensis</i> Bruce and Svoboda, 1984	-	+	-
204. <i>Zenopontonia noverca</i> (Kemp, 1922)	-	+	+

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